

ASSESSING MULTIDIMENSIONAL WELL-BEING: DEVELOPMENT AND VALIDATION OF THE I COPPE SCALE

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The purpose of this study was to develop and validate a scale of perceptions of well-being in key areas of life. We developed the I COPPE Scale, which incorporates overall as well as Interpersonal, Community, Occupational, Physical, Psychological, and Economic well-being. A total of 426 U.S. participants provided online responses to the I COPPE Scale and relevant comparison instruments. We used exploratory structural equation modeling to examine the factor structure of responses and document convergent validity by comparing I COPPE Scale scores with comparison instrument scores. We found strong empirical evidence to support the theorized factors. This study fully and reliably assessed the underlying constructs of the I COPPE Scale and provided psychometric evidence of construct validity. The ability of this scale to assess the domains in a single, easy to administer instrument is a potential contribution to the growing body of literature on well-being. © 2015 Wiley Periodicals, Inc.

The field of community psychology is invested in the promotion of well-being (Cowen, 1991; Nelson & Prilleltensky, 2010; Prilleltensky, 2012). Whereas this discipline has focused on measuring community well-being and sense of community (Peterson, Speer, & McMillan, 2008), other disciplines have focused on assessing subjective well-being (Cummins, 2010; Diener, Helliwell, & Kahneman, 2010), economic well-being (Prawitz et al., 2006) or physical well-being (Cheak-Zamora, Wyrwich, & McBride, 2009; Llewellyn, McGurk, & Weinman, 2006; Ware, Kosinski, & Keller, 1996). In the medical domain,

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quality of life measures have been used to assess patient outcomes through the presence of favorable states and the absence of symptoms such as pain and fatigue (Andrews & Withey, 1976; Campbell, Converse, & Rodgers, 1976; Cella et al., 2010). In our view, there is a need to create one tool to measure multidimensional well-being.

Given the above rationale, there is broad consensus that well-being entails satisfaction with life as a whole and with specific domains, such as health, economic situation, and relationships (Chmiel, Brunner, Martin, & Schalke, 2012; Cohen, 1999; Diener, Helliwell, et al., 2010; Huppert & Linley, 2011a,b; Pavot & Diener, 2008; Prilleltensky & Prilleltensky, 2006; Rath & Harter, 2010). The value of well-being derives from intrinsic and extrinsic merits. Well-being is no doubt a valuable good on its own accord, but it is also desirable for its association with positive states such as mental health, physical health, and meaningful relationships (Andrews & Withey, 1976; Campbell et al., 1976; Buettner, 2008, 2010; Nieboer, Lindenberg, Boomsma, & Van Bruggen, 2005; Pavot & Diener, 2008; Seligman, 2011). People who report high levels of well-being, as in flourishing, have fewer physical and mental health problems, fewer days of missed work, better relationships, longer lives, greater productivity at work, and lower risk of suicide (Keyes, 2005a, 2007; Keyes et al., 2012; Keyes, Dhingra, & Simoes, 2010; Keyes & Grzywacz, 2005; Keyes & Simoes, 2012).

Since the advent of the two-factor model of mental health, clinicians and researchers have begun to show special interest in well-being as a viable route to complete mental health. The two-factor model posits that complete mental health derives from *both* the reduction of mental illness *and* the enhancement of flourishing or well-being (Keyes, 2005a, 2007). Hitherto, much effort has been invested in the former, but relatively little in the latter. Keyes (2007) and Seligman (2011) have persuasively argued for a balance between the two paradigms. Complete mental health requires that we focus more attention on understanding and promoting well-being. The refinement of tools for assessing well-being is a crucial part of this endeavor. Validated measures can lead to better assessment and more effective interventions for individuals, groups, and communities alike. In this article, we describe the rationale for, and the validation of, a new tool to assess multiple dimensions of well-being. Our instrument can be used in clinical, educational, organizational, and community settings to evaluate the level of well-being and to plan therapeutic and psychosocial interventions.

While researchers have developed important, valid, and reliable instruments to assess different aspects of well-being (e.g., Cummins, Mellor, Stokes, & Lau, 2010; Diener, Emmons, Larsen, & Griffin, 1985; International Wellbeing Group, 2006; Keyes, 1998; Cella et al., 2010; Ryff, 1989; Ryff & Keyes, 1995), we believe that the various models have not yet been integrated into a single and coherent scale covering well-being, overall, and in the most important domains of life. As a multidimensional construct, it makes sense to integrate overall satisfaction (Diener et al., 1985) with psychological (Ryff & Keyes, 1995) and social (Keyes, 1998) aspects of well-being, along with facet theories (Chmiel et al., 2012; Cohen, 1999; International Wellbeing Group, 2006; Nieboer et al., 2005), into one survey that assesses crucial domains of well-being.

Recent work by Gallagher, Lopez and Preacher (2009) has demonstrated that well-being is indeed an integrative construct comprising hedonic (e.g., happiness, positive affect), eudaimonic (e.g., self-realization, meaning), and social aspects at the same time. This approach is nicely complemented by the scholarly tradition examining facets of well-being (Chmiel et al., 2012; Cohen, 1999; Nieboer et al., 2005). In an effort to synthesize the various theories of well-being, Diener, Scollon, and Lucas (2009) suggested a hierarchical model. At the top level there is subjective well-being, which reflects an overall evaluation of a person's life. At the next level there are four components that help understand

subjective well-being in more precise terms: positive affect (e.g., joy, love, contentment), negative affect (e.g., sadness, anger, worry), satisfaction (e.g., fulfillment, meaning, life satisfaction), and domain satisfaction (e.g., work, health).

Gonzalez, Coenders, Saez, and Casas (2010) demonstrated the effects of assessments of specific domains of life (relationships, health, stimulation, and achievements) on overall life satisfaction: The higher the specific domains, the higher the overall level of subjective well-being. Their work is part of ongoing efforts to establish the relationship among specific domains of life with overall satisfaction with life, with growing consensus that there are bidirectional relationships among particular facets and overall judgments of well-being. Judgments of satisfaction with life as a whole influence judgments of satisfaction with specific domains (top-down approach), and overall satisfaction with life is the result of evaluations of specific domains (bottom-up approach; Chmiel et al., 2012; Pavot & Diener, 2008).

In an effort to capture various dimensions of well-being in one scale, Nieboer et al. (2005) developed the Social Production Function Instrument for the Level of Well-being (SPF-IL). Social production function theory asserts that affection, behavioral confirmation, status, comfort, and stimulation comprise the main dimensions of subjective well-being. Confirmatory factor analysis supported the multidimensional quality of well-being using the above-mentioned factors.

Another important and valid scale measuring various domains of well-being is the Personal Well-Being Index (PWI), developed by the International Wellbeing Group (2006). The PWI evaluates eight areas of life thought to be “the minimum set of domains which represent the first-level deconstruction of Satisfaction with ‘Life as a Whole’” (International Wellbeing Group, 2006, p. 6). This theoretically driven approach yielded the following eight domains: standard of living, health, achieving in life, relationships, safety, community connectedness, future security, and spirituality/religion.

Contributing to the facet approach, the Gallup Corporation (Rath & Harter, 2010) has advanced a five-factor model, which claims that career, social relationships, physical health, community, and finances constitute the central elements of well-being. This integrative framework does much to synthesize the disparate facets that have been proposed thus far. Our own synthesis of the various theories, models, facets, and measures of well-being is quite close to the Gallup model, but with some important distinctions, which we note below.

DEVELOPMENT OF THE I COPPE SCALE

Similar to the approach employed by the International Wellbeing Group (2006), we aimed to develop a tool with the minimum set of domains that would encompass perceptions of well-being in central areas of life. This was essential to our goal of integrating and synthesizing disparate models, facets, and measures of well-being into one coherent instrument. We also aimed to construct a tool that would retain a measure of overall well-being, as it would enable useful comparisons with other existing tools and within our own subscales. To do so, we relied on two relevant bodies of scholarly work: components of well-being and measurements of well-being. Our synthesis yielded six domains of well-being: **I**nterpersonal, **C**ommunity, **O**ccupational, **P**hysical, **P**sychological, and **E**conomic (I COPPE).

These domains, in addition to overall well-being, afford clinicians, epidemiologists, and community researchers an opportunity to create profiles of how individuals and

groups function in key areas of life and formulate interventions accordingly. While overall well-being may be measured using objective and subjective indicators, and both are useful and valid (Campbell et al., 1976; Cummins, 2010; Cummins et al., 2010; Diener, 2009; Prilleltensky, 2012), our scale concentrates on the latter, as we ask people for their perceptions. Thus, in our scale, overall well-being is a positive state of affairs, as perceived by individual respondents (see Appendix A for item descriptions).

Overall well-being has been positively correlated across many studies with specific facets of well-being (Chmiel et al., 2012; Cohen, 1999; Nieboer et al., 2005). The construct of interpersonal well-being reflects satisfaction with the quality of relationships with important people such as family, friends, and colleagues. Interpersonal well-being has been shown to correlate highly with a number of positive outcomes, such as longevity, (Buettner, 2008, 2010), resilience (Cacioppo, Reis, & Zautra, 2011), physical health (Cohen, 2004; Rath & Harter, 2010), mental health, and overall well-being and life satisfaction (Prilleltensky & Prilleltensky, 2006). Several instruments assessing well-being contain items on satisfaction with relationships, including Ryff's scales (Ryff, 1989; Ryff & Keyes, 1995), the PWI, and the SPF-IL.

The construct of community well-being pertains to the level of satisfaction with one's community. Community well-being has also been shown to correlate with mental health, community participation, and sense of belonging and to be inversely related to depression (Peterson et al., 2008). It is also the main construct for the Social Well-being Scale (Keyes, 1998), part of the PWI (International Wellbeing Group, 2006), and a crucial element of well-being in the Gallup research (Rath & Harter, 2010).

We chose occupational well-being, instead of just satisfaction with work, because many people do not have paid employment, such as stay-at-home parents or elderly people volunteering in the community. For them, staying at home or volunteering is their main occupation. In our view, occupation is a more inclusive term than work, and our item regarding occupation reflects that reasoning. For us, occupational well-being reflects the state of satisfaction with one's job, vocation, or avocation, as determined by individuals themselves. Rath and Harter (2010) identified career well-being as one of the key dimensions of well-being, and ample research supports that claim. Good working conditions enhance well-being, while poor working conditions and unemployment exert a large toll on overall life satisfaction (Clark, 2010; Harter & Arora, 2010). Work is also one of the explicit and important facets of well-being (Chmiel et al., 2012).

We define physical well-being as a state of satisfaction with one's overall health and wellness. Research shows that physical wellness correlates highly with overall well-being and is used in some measures (Chmiel et al., 2012; Gonzalez et al., 2010; International Wellbeing Group, 2006), but it is absent from others, such as the Satisfaction with Life Scale (SWLS; Diener et al., 1985) or Ryff's scales. International research based on the work of the Gallup Corporation confirms the importance of physical well-being for overall life satisfaction (Rath & Harter, 2010).

The construct of psychological well-being pertains to the level of satisfaction with one's emotional life. Psychological well-being has been associated with higher physical wellness (Keyes, 2005b) and lower mental illness (Keyes, 2007). In our view, psychological well-being is different from overall well-being, and distinct from physical health, a popular facet in the research. Rath and Harter (2010) include physical wellness but not psychological wellness in their synthesis. Affect and emotional well-being figure prominently in earlier scales, such as the SPF-IL, and Ryff's scales, where there is a section on self-acceptance, but do not appear on the PWI. The PWI contains items on safety and feeling secure, but they may be interpreted in ways other than emotional or psychological. The importance

of psychological well-being for individuals and society at large convinced us to include a section on psychological and emotional well-being.

Economic well-being has to do with the level of satisfaction with one's financial situation. In general, favorable economic conditions have been associated with better mental and physical health (Commission on Social Determinants of Health, 2008; Donohoe, 2013; Levy & Sidel, 2006; Marmot, 2004; Prilleltensky, 2012; Sen, 2009) and life satisfaction overall (Diener, Kahneman, Tov, & Arora, 2010). Economic well-being has been recognized as an important facet of well-being (Chmiel et al., 2012). The PWI contains an item on standard of living, which is related to economic well-being, but it is not quite the same. Economic well-being is absent from the SWLS, Ryff's scales, and the SPF-IL. To summarize, we identified content that was important but dispersed across various instruments, as opposed to integrated into a single one, which is our hope for the I COPPE Scale. In addition to having robust content and integrating diverse theories and facets of well-being, we were invested in having a proven methodology. For this reason, we turned to the self-anchoring method developed by Cantril (1965).

The I COPPE Scale comprises 21 items based on the Cantril ladder method of the Self-Anchoring Striving Scale (Cantril, 1965). The term *ladder* is used to denote a vertical visual analogue with interval numbered steps at each rung. Respondents are typically asked to rate themselves on the construct somewhere on the ladder. Conceptually, the self-anchoring scaling method taps the respondent's internal reference of what he or she considers the "best" and "worst" levels of satisfaction in a global or specific domain of his or her life now, in the past, and in the future. This concept is in line with the importance of measuring the respondent's perception of his or her life and supports the life satisfaction component of Diener et al.'s (1985) definition of subjective well-being (SWB). This measurement method differs from the traditional psychometric approach of providing the respondent with predefined values of well-being at each interval of a metric scale (Kilpatrick & Cantril, 1960). Strong psychometric evidence of validity and reliability has been documented for this self-anchoring method by well-being researchers who use it with the Life Evaluation Index (Gallup, 2009).

STUDY AIMS

The aims of this study were as follows: (a) to examine the factor structure of responses to the I COPPE Scale and (b) evaluate the convergent validity of the I COPPE factors. The following two research questions were examined: (a) Does the a priori hypothesized measurement theory for the I COPPE emerge? Figure 1 depicts the a priori hypothesized parameterization. (b) Do the seven I COPPE factors exhibit convergent validity with scores from established comparison instruments designed to measure theoretically relevant constructs?

METHOD

Participants

Participants were 426 (214 women, 212 men) English-speaking adults who resided somewhere in the United States. These voluntary online respondents ranged from 20 to 88 years of age (mean [M] = 50.86, standard deviation [SD] = 13.57) and legally consented to

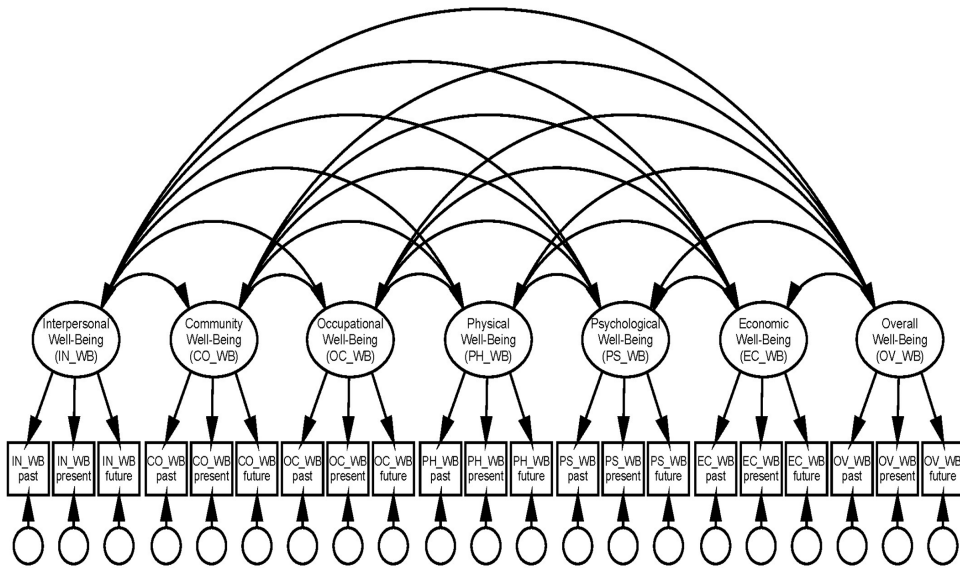


Figure 1. A priori measurement theory for responses to the I COPPE Scale.

Note. Covariances among pairs of relevant residuals were not depicted to reduce clutter. All pattern coefficients (even those not displayed) were estimated under the ESEM approach.

participate by electronically signing the study consent form approved by our academic institution’s Internal Review Board (IRB; see Table 1 for participant demographics). Upon full completion of the one-time survey battery, each respondent received a credit of \$1 from the panel recruitment company that directed participants to this study’s anonymous and secure survey website.

Procedures

This study was conducted online. All potential respondents were recruited through an online survey panel company. E-mail invitations embedded with anonymous survey links were sent to English speakers 18 years old and older who reside in the United States. Data were analyzed from recruited respondents who passed a series of gate-keeping items: (a) a CAPTCHA item to ensure survey responses were human generated and not coming from a computer; (b) two screen-out items for age and U.S. living status; (c) an electronic signature of the IRB approved consent form; and (d) an attention filter.

Participants were informed in the consent form that the primary purpose of the study was to test the validity of a well-being survey. The survey battery tapped personal well-being satisfaction across the six I COPPE life domains as well as overall well-being. All consenting respondents were administered the I COPPE Scale. To examine convergent validity, these same respondents also completed established comparison instruments corresponding to the I COPPE and overall well-being constructs.

Measures

Demographic questionnaire. A nine-item questionnaire was developed for the study to collect demographic information. See Table 1 for participant demographics.

Table 1. Participant Demographics

<i>Variable</i>	<i>n</i>	<i>(%)</i>
Gender		
Females	214	(50.2)
Males	212	(49.8)
Ethnicity		
White/Caucasian	352	(82.6)
African American	31	(7.3)
Hispanic	13	(3.1)
Asian	12	(2.8)
Native American	9	(2.1)
Other	9	(2.1)
Education level completed		
High school equivalent	98	(23.0)
Vocational/technical school (2-year)	38	(8.9)
Some college	130	(30.5)
College graduate (4-year)	108	(25.4)
Master's or higher	52	(12.2)
Current marital status		
Divorced	51	(12.0)
Married or living with partner	265	(62.2)
Separated	7	(1.6)
Single	87	(20.4)
Widowed	16	(3.8)
Employment status		
Full-time	169	(39.7)
Part-time	58	(13.6)
Retired	108	(25.4)
Unemployed	91	(21.4)
Occupation		
Management & professional	136	(31.9)
Service, sales, & office	156	(36.7)
Farming, construction, production	61	(14.3)
Missing	73	(17.1)
Current household income		
Rather not say	8	(1.9)
Under \$10,000	26	(6.1)
\$10,000–\$29,000	97	(22.8)
\$30,000–\$74,000	203	(47.6)
\$75,000–Over \$100,000	92	(21.6)

N = 426.

I COPPE Scale. The I COPPE Scale comprises 21 items designed to measure seven oblique well-being factors (see Figure 1): Interpersonal (IN_WB), Community (CO_WB), Occupational (OC_WB), Physical (PH_WB), Psychological (PS_WB), Economic (EC_WB), and overall (OV_WB). Each factor was measured with the same three items pertaining to three time periods: past (PA; a year ago), present (PR; now), and future (FU; a year from now). Thus, the nonstem content of seven items was unique and corresponded to the seven factors (see Appendix B). Residuals for pairs of indicator variables that shared an item stem (e.g., IN_WB_PA and CO_WB_PA) were free to covary because a method effect was hypothesized by time period referenced (Saris & Aalberts, 2003). For each item, a stem question pertaining to the life domain of interest was posed, asking respondents to rate

themselves on a scale ranging from 0 (*worst*) to 10 (*best*). For example, the question stem for the interpersonal domain is:

On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to relationships with important people in your life, on which number (do you stand now? did you stand a year ago? will you stand a year from now?)

Respondents indicated levels of satisfaction using the Cantril (1965) ladder method, which is typically a vertical visual analogue with interval numbered steps provided at each rung of the visual ladder.

Comparison Measures

OV_WB. The SWLS (Diener et al., 1985) provided the comparison measure. In this five-item instrument, life satisfaction is measured by asking respondents to provide a global judgment of their lives. Widely used in research in the last two decades, this instrument is short and easy to use (Pavot & Diener, 2008), has good psychometric qualities, and is an excellent measure of global SWB (Chmiel et al., 2012). The SWLS has shown good psychometric evidence supporting its use in this study (Blais, Vallerand, Pelletier, & Brigare, 1989; Hills & Argyle, 2001; Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2011; Pavot & Diener, 1993). The *OV_WB* factor was hypothesized to positively correlate with SWLS scores (labeled Overall from this point forward).

IN_WB. The Social Connectedness Scale-Revised (SCS-R; Lee, Draper, & Lee, 2001) provided the comparison measure. Social connectedness is considered an attribute of the self that reflects cognitions of enduring interpersonal closeness with the social world (Lee & Robbins, 1995). The SCS-R is a 20-item scale derived from the original SCS scale. The SCS-R comprises 10 positively and 10 negatively worded items, each rated on a 6-point Likert scale. The scale has acceptable psychometric evidence supporting its use (Lee & Robbins, 1995; Lee et al., 2001). The *IN_WB* factor was hypothesized to positively correlate with SCS-R scores (labeled Interpersonal from this point forward).

CO_WB. The Brief Sense of Community Scale (BSCS; Peterson et al., 2008) provided the comparison measure. The multidimensional theory of sense of community comprises four elements: needs fulfillment, group membership, influence, and emotional connection (McMillan & Chavis, 1986; Peterson et al., 2008; Wombacher, Tagg, Bürgi, & MacBryde, 2010). The BSCS comprises eight positively worded items. Answers are given on a 5-point Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). Acceptable reliability and validity evidence has been documented for the BSCS (Peterson et al., 2008; Wombacher et al., 2010). The *CO_WB* factor was hypothesized to positively correlate with BSCS scores (labeled Community from this point forward).

OC_WB. The Abridged Job in General Scale (AJIG; Stanton et al., 2002) provided the comparison measure. The AJIG was used to measure the construct of job satisfaction, which corresponds closely to our study's definition of *OC_WB*. The AJIG was developed as a shortened version of the well-established Job in General Scale (JIG; Ironson, Smith, Brannick, Gibson, & Paul, 1989). The AJIG comprises a list of eight phrases and adjectives

that describe different aspects of a job in an overall sense. High scores reflect high job satisfaction. Strong psychometric evidence has been established for the AJIG (Brodke et al., 2009; Ironson, Smith, Brannick, Gibson, & Paul, 1989). The OC_WB factor was hypothesized to positively correlate with AJIG scores (labeled Occupation from this point forward).

PH_WB. The 12-item Short Form Health Survey, version 2 (SF-12v2) provided the comparison measure. The SF-12v2 is a gold standard comparison for the PH_WB construct and measures the respondent's perceptions of his or her functional health and well-being across eight health domains. The developers of this instrument describe functional health as the degree to which individuals currently perform their daily behaviors and activities without limitations resulting from health problems. Excellent and extensive psychometric evidence exists for the SF-12v2, which is a short form of the revised SF-36v2 Health Survey (Cheak-Zamora et al., 2009; Llewellyn et al., 2006; Ware et al., 1996). The SF-12v2 takes 2 to 3 minutes to administer and yields eight health domain scale scores as well as two component scores. Only one of the component scores, the Physical Component Summary Score (PCS) was used for analyses in this study. The PH_WB factor was hypothesized to positively correlate with PCS scores (labeled Physical from this point forward).

PS_WB. The Flourishing Scale (FS; Diener, Wirtz, et al., 2009) provided the comparison measure. The FS, formally known as the Psychological Well-being Scale, defines psychological well-being as a construct representing optimal human functioning. The FS is a brief eight-item summary survey of an individual's self-perceived functioning in areas such as relationships, self-esteem, purpose and meaning, and optimism. High scores on the FS reflect the respondent's perception of him/herself as a person with many psychological resources and strengths across diverse areas of functioning. Acceptable psychometric evidence has been documented for the use of the FS in our study (Diener, Wirtz, et al., 2009; Diener, Wirtz, Tov, et al., 2010). The PS_WB factor was hypothesized to positively correlate with FS scores (labeled Psychological from this point forward).

EC_WB. The Personal Financial Well-being Scale (PFW; Prawitz et al., 2006) provided the comparison measure. According to the instrument developers, financial well-being and financial distress are subjective phenomena. The PFW comprises eight items, with four items representing a sense of one's present state of financial well-being and the other four items characterizing one's reaction to his or her present state of financial well-being. On a 10-point continuum from 1 (*most distressed*) to 10 (*least distressed*), respondents indicate personal levels of economic-based distress, worry, and confidence across various situation-based financial prompts. Acceptable psychometric evidence exists for the PFW (O'Neill, Sorhaindo, Prawitz, Kim, & Garman, 2006; Prawitz et al., 2006). The EC_WB factor was hypothesized to positively correlate with PFW scores (labeled Economic from this point forward).

Statistical Analyses

Analyses were performed within the exploratory structural equation modeling (ESEM; Asparouhov & Muthén, 2009) framework as implemented in *Mplus 7* (Muthén & Muthén, 1998–2012). ESEM is a new methodology that integrates the relative advantages of both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) within the more

general structural equation model, and it offers a useful framework for initial validity studies focused on both the measurement and the latent variable models (e.g., Marsh et al., 2009). Maximum likelihood estimation with a correction for non-normality was used. Indexes of model data fit considered were as follows: χ^2_R , root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and Tucker-Lewis index (TLI). This set of fit indices was selected so that different “types” of model data fit were evaluated: absolute (e.g., χ^2_R and SRMR), parsimony-adjusted (e.g., RMSEA), and incremental (e.g., CFI and TLI).

Considering a diverse set of model data fit indices is consistent with cautions against overreliance on a particular type of model data fit index (e.g., absolute) at the possible expense of substantive considerations (e.g., Kline, 2010; Myers, Chase, Pierce, & Martin, 2011). Heuristic classifications for model data fit (e.g., exact, close) were consistent with Hu and Bentler (1999). Latent variable reliability was measured with coefficient H (Hancock & Mueller, 2001).

Research question 1. The first research question was answered by fitting an ESEM model with geomin (Yates, 1987) rotation. Geomin rotation was selected because it has been shown to work relatively well for complex structures often observed in practice (Sass & Schmitt, 2010). Seven factors were specified guided by the a priori hypothesized measurement theory.

Parameter estimates were compared to the a priori hypothesized measurement theory (see Figure 1). The estimated rotated pattern matrix, $\hat{\Lambda}^*$, was inspected for statistically significant secondary pattern coefficients (i.e., “cross-loadings”). A secondary pattern coefficient can be thought of as a nonzero “loading” on a factor that an item was not initially intended to measure in addition to a nonzero “loading” on the factor that the item was intended to measure. Moderate to high correlations between the rotated latent factors, \mathbf{Y}^* , were hypothesized.

Research question 2. The second research question built on the previous one by introducing observed comparison measures into the model (i.e., the full model). Each comparison measure was free to covary with each of the seven I COPPE factors (and with other comparison measures) in the full model. A priori expectations regarding these covariances were detailed in the previous section entitled comparison measures.

RESULTS

Research Question 1

The seven factor ESEM model failed to reject the exact fit test: $\chi^2_R(21) = 19$, $p = .554$, RMSEA = .000 (.000, .038), SRMR = .006, CFI = 1.00, and TLI = 1.00. Thus, the null hypothesis that the a priori measurement model (i.e., Figure 1) was exactly correct could not be rejected, and, thus, this model was viewed as within the population of models that were consistent with the observed data. Elements within $\hat{\Lambda}^*$ were generally consistent with a priori expectations (compare Table 2 to Figure 1). For example, all 21 of the elements within $\hat{\Lambda}^*$ that were consistent with Figure 1 (e.g., $\hat{\lambda}^*_{OV_WB_PR,OV_WB}$ or, in words, overall well-being present loading on overall well-being) were statistically significant and meaningfully large (e.g., these standardized values ranged from .64 to .99).

Table 2. Geomin-Rotated Pattern Coefficients (A), Standard Errors, and Standardized Pattern Coefficients (A°)

Item	Overall well-being (OV_WB)		Interpersonal well-being (IN_WB)		Community well-being (CO_WB)		Occupational well-being (OC_WB)		Physical well-being (PH_WB)		Psychological well-being (PS_WB)		Economic well-being (EC_WB)	
	λ	λ°	λ	λ°	λ	λ°	λ	λ°	λ	λ°	λ	λ°	λ	λ°
OV_WB_PR	1.76 (.39)	.83	0.13(.09)	.06	0.01(.06)	.00	-0.02(.05)	-.01	0.07(.10)	.03	0.33(.52)	.16	0.01(.07)	.00
OV_WB_PA	1.34 (.22)	.64	0.07(.09)	.03	0.12(.10)	.06	0.02(.07)	.01	0.14(.12)	.07	-0.13(.31)	-.06	0.02(.09)	.01
OV_WB_FU	1.49 (.36)	.66	-0.06(.08)	-.03	-0.03(.07)	-.01	0.22(.12)	.10	-0.09(.11)	-.04	0.33(.45)	.15	0.13(.11)	.06
IN_WB_PR	-0.01(.09)	.00	2.13 (.10)	.95	-0.07(.05)	-.03	0.03(.05)	.01	0.03(.07)	.01	0.17 (.08)	.07	0.03(.07)	.01
IN_WB_PA	0.01(.10)	.00	1.78 (.10)	.80	0.09(.08)	.04	0.01(.06)	.01	-0.03(.07)	-.02	-0.07(.09)	-.03	0.03(.07)	.02
IN_WB_FU	0.11(.16)	.05	1.81 (.12)	.81	0.08(.07)	.03	0.01(.07)	.01	0.03(.10)	.02	-0.03(.08)	-.02	-0.03(.09)	-.02
CO_WB_PR	0.02(.09)	.01	0.06(.05)	.03	2.04 (.09)	.93	-0.05(.05)	-.02	0.01(.07)	.01	-0.09(.06)	-.04	0.11(.06)	.05
CO_WB_PA	0.05(.10)	.03	-0.03(.05)	-.02	1.84 (.11)	.83	0.27(.15)	.12	0.00(.07)	.00	-0.09(.06)	-.04	-0.16 (.08)	-.07
CO_WB_FU	-0.04(.11)	-.02	0.03(.07)	.01	1.90 (.12)	.84	-0.03(.05)	-.01	0.03(.10)	.01	0.09(.08)	.04	0.13(.09)	.06
OC_WB_PR	-0.14(.08)	-.05	0.21 (.10)	.07	0.01(.06)	.00	2.66 (.10)	.90	0.00(.09)	.00	0.17(.10)	.06	0.28(.13)	.09
OC_WB_PA	0.19(.15)	.07	-0.01(.07)	.00	0.13(.11)	.05	2.15 (.15)	.75	0.07(.13)	.03	-0.19(.13)	-.07	-0.02(.09)	-.01
OC_WB_FU	0.17(.16)	.06	-0.09(.08)	-.03	-0.04(.08)	-.01	2.45 (.15)	.84	0.06(.12)	.02	0.08(.10)	.03	-0.05(.09)	-.02
PH_WB_PR	0.05(.08)	.02	-0.01(.05)	-.01	-0.02(.05)	-.01	-0.05(.06)	-.02	2.16 (.11)	.99	0.08(.06)	.04	0.01(.06)	.01
PH_WB_PA	0.08(.12)	.04	0.06(.08)	.03	0.06(.09)	.03	0.09(.10)	.04	1.56 (.11)	.73	-0.12(.09)	-.06	-0.04(.09)	-.02
PH_WB_FU	-0.09(.14)	-.04	0.00(.09)	.00	0.01(.08)	.01	0.10(.10)	.04	1.65 (.17)	.72	0.14(.13)	.06	0.14(.10)	.06
PS_WB_PR	0.05(.11)	.02	0.10(.07)	.04	-0.01(.05)	.00	-0.02(.05)	-.01	0.20(.12)	.08	2.05 (.13)	.87	0.07(.06)	.03
PS_WB_PA	0.03(.12)	.01	0.04(.10)	.02	0.21(.13)	.09	0.13(.12)	.06	-0.01(.11)	-.01	1.50 (.16)	.67	-0.05(.11)	-.02
PS_WB_FU	0.14(.15)	.06	-0.05(.07)	-.02	0.08(.08)	.04	0.06(.07)	.03	0.03(.09)	.01	1.75 (.15)	.76	0.04(.07)	.02
EC_WB_PR	-0.07(.05)	-.03	0.11(.09)	.04	0.00(.07)	.00	0.15(.10)	.06	-0.08(.07)	-.03	0.10(.09)	.04	2.43 (.13)	.95
EC_WB_PA	0.29(.18)	.12	-0.09(.11)	-.04	0.11(.11)	.05	0.00(.08)	.00	0.09(.13)	.04	-0.11(.11)	-.05	1.55 (.17)	.64
EC_WB_FU	0.21(.21)	.08	-0.01(.09)	.00	0.02(.10)	.01	-0.05(.09)	-.02	0.25(.20)	.10	0.01(.11)	.00	1.76 (.16)	.68

Note. Statistically significant ($p < .05$) coefficients are in boldface. SE = standard error; PR = present; PA = past; FU = future.

Further, note that only 3 of the 126 elements within $\hat{\Lambda}^*$ that were estimated in the ESEM approach, and inconsistent with Figure 1 (e.g., $\hat{\lambda}_{OV_WB_PR,OV_WB}^*$ or, in words, occupational well-being present loading on interpersonal well-being), were statistically significant. The largest standardized pattern coefficient, λ_{pr}^{*0} , within this group of three was equal to 0.07. Simply, almost all cross-loadings that were hypothesized to be zero (or at least not meaningfully large) were, in fact, at least nearly indistinguishable from zero. Interfactor correlations ranged from $\hat{\psi}_{IN_WB,PH_WB}^* = .36$ to $\hat{\psi}_{OV_WB,PH_WB}^* = .70$ while latent variable reliability ranged from $\hat{H}_{PS_WB} = .95$ to $\hat{H}_{CO_WB} = .99$. A reasonable answer to research question 1 was that there was strong empirical evidence for the a priori measurement theory for explaining responses to the I COPPE Scale.

Research Question 2

The full model exhibited close fit: $\chi_R^2(119) = 193$, $p < .001$, RMSEA = .038 (.028, .048), SRMR = .019, CFI = .991, and TLI = .972. Thus, the null hypothesis that the full latent variable model (i.e., a priori measurement model with the comparison measures as covariates) was close to correct could not be rejected, and, thus, this model was viewed as within the population of models that could be viewed as close to consistent with the observed data. Elements within $\hat{\psi}^*$ were generally consistent with a priori expectations (see Table 3). For example, correlations between each I COPPE factor and the corresponding comparison measure ranged from $\hat{\psi}_{IN_WB,Interpersonal}^* = .43$ to $\hat{\psi}_{EC_WB,Economic}^* = .74$.

Further, the correlation of each comparison measure with the corresponding I COPPE factor (e.g., $\hat{\psi}_{EC_WB,Economic}^* = .74$) was generally larger than any other correlation between said comparison measure and any other I COPPE factor (e.g., the next largest correlation between Economic and an I COPPE factor was $\hat{\psi}_{OV_WB,Economic}^* = .51$). The only comparison measure for which this pattern did not hold was Interpersonal, where the largest correlation was, $\hat{\psi}_{PS_WB,Interpersonal}^* = .53$, while the correlation of primary interest was $\hat{\psi}_{IN_WB,Interpersonal}^* = .43$. A reasonable answer to research question 2 was that, in general, there was strong empirical evidence for the convergent validity of I COPPE factors.

DISCUSSION

Well-being is one of the ultimate goods—with both intrinsic and extrinsic value. Well-being is associated with many positive outcomes, such as fewer physical and mental health problems, more meaningful relationships, increased life span and work productivity, and lower risk of suicide (Keyes, 2005a, 2007; Keyes & Grzywacz, 2005; Keyes & Simoes, 2012; Keyes et al., 2010; Keyes et al., 2012). It is also an essential part of the equation of the two-factor model, according to which complete mental health requires both the reduction of pathology and the enhancement of well-being (Keyes, 2005a, 2007). While significant attention has been given to the former, little emphasis has been placed on the latter. Our study contributes to the rectification of this imbalance.

Recent research underscores the complexity of well-being as a construct, comprising multiple factors (Diener, Scollon, et al., 2009; Gallagher et al., 2009). A limitation of the existing literature is that measurement tools assess disparate factors of well-being. Consequently, important aspects of this construct are dispersed across a variety of instruments.

Table 3. I COPPE Factors and Comparison Measures: Correlations, Means, and Standard Deviations

Factor/Measure	I COPPE factor														Comparison measure														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1. Overall WB	1.00																												
2. Interpersonal WB	.52**	1.00																											
3. Community WB	.55**	.50**	1.00																										
4. Occupational WB	.63**	.44**	.48**	1.00																									
5. Physical WB	.70**	.36**	.45**	.55**	1.00																								
6. Psychological WB	.63**	.51**	.54**	.62**	.63**	1.00																							
7. Economic WB	.65**	.42**	.55**	.58**	.53**	.60**	1.00																						
8. Overall	.71**	.53**	.51**	.59**	.58**	.67**	.65**	1.00																					
9. Interpersonal	.43**	.43**	.49**	.39**	.36**	.53**	.37**	.50**	1.00																				
10. Community	.38**	.25**	.59**	.29**	.27**	.35**	.43**	.42**	.48**	1.00																			
11. Occupation	.44**	.24**	.34**	.58**	.39**	.44**	.46**	.54**	.43**	.26**	1.00																		
12. Physical	.29**	.06	.09	.24**	.59**	.15*	.12	.21**	.07	.02	.16**	1.00																	
13. Psychological	.56**	.45**	.49**	.55**	.52**	.61**	.50**	.67**	.76**	.43**	.53**	.20**	1.00																
14. Economic	.51**	.27**	.38**	.45**	.36**	.47**	.74**	.58**	.33**	.41**	.39**	.10	.47**	1.00															
M	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.19	79.50	3.16	15.84	48.48	40.39	5.01															
SD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	7.98	19.78	1.01	7.66	10.39	9.39	2.42															

Note. WB = well-being.
* $p < .01$. ** $p < .001$.

In light of this limitation, the overarching intent of this study was to integrate important aspects of well-being into a single tool. Specifically, we tested a seven-factor theory of well-being (six life domains as well as overall well-being) through a new multidimensional well-being tool and assessed its construct validity using well-established comparison measures. This study fully and reliably assessed the underlying constructs of the I COPPE Scale and provided psychometric evidence of construct validity. Our research confirmed the presence of the hypothesized seven factors of well-being. These seven factors include Interpersonal, Community, Occupational, Physical, Psychological, Economic, and Overall Well-Being. Furthermore, the study demonstrated meaningful and statistically significant correlations among the seven subscales and seven existing comparison measures.

The integrative nature of the I COPPE Scale fills some gaps in the literature. Psychological well-being, for example, is absent from the well-being models and tools developed by the Gallup Corporation (Rath & Harter, 2010) and the International Wellbeing Group (2006). Both economic well-being and physical well-being are absent from the SWLS (Diener et al., 1985). Occupational well-being is narrowly defined as career well-being by Gallup and absent from the International Wellbeing Group. The I COPPE Scale incorporates into one instrument these important domains of well-being, which have been previously recognized in facet research (Chmiel et al., 2012; Cohen, 1999; Gonzalez et al., 2010; Nieboer et al., 2005). We aimed to develop a parsimonious theory that would cover the central domains of well-being. Our approach began with a coherent theory, which led to the development of a coherent instrument.

Using the ESEM approach, the results support seven robust factors of well-being, with very few unexpected correlations between the elements. The correlations among the six individual factors and overall well-being were all statistically significant. Additionally, the correlations between each I COPPE factor and the corresponding comparison measure were statistically significant, providing support for convergent validity. Interestingly, the weakest correlation between an ICOPPE factor and its corresponding comparison measure was in the interpersonal realm. The relatively weaker (albeit statistically significant) correlation between the interpersonal factor and the SCS-R, its comparison measure, may be due to a difference in focus. Whereas the interpersonal factor explicitly inquires about the quality of the relationship with close people in one's life, the SCS-R taps perceptions of interpersonal closeness with the social world, a more general construct. This conjecture requires further investigation.

Also requiring further study is the scoring system for the I COPPE Scale. For this study, we used a latent variable approach where the observed variables referenced three time points (past, present, and future) for each of the seven specified factors. Further exploration is required to see if using all three time points provides incremental value, or if one time point is enough to reliably assess well-being. Gallup (2009), for instance, uses "present" and "future" only. In the present study, there was a noteworthy trend for the standardized pattern coefficients for the "present" items to be larger than the coefficients for the "past" or "future" items for all seven factors (see Table 3). This pattern may signify that the "present" item is a more robust indicator of people's well-being and related trends currently are under initial investigation (e.g., Myers et al., in press).

Limitations

This study has a few notable limitations. While the data support the presence of the hypothesized seven factors, it does not rule out the possibility that other potentially

important factors not examined in this study also contribute meaningfully to well-being. In addition, the use of a web-based survey, with individuals who are actively involved in completing online surveys, may limit the ability to generalize results to the general population.

Finally, upon reflection, our interpersonal well-being construct may be more closely aligned with the concept of intimacy rather than with social relationships in general. The comparison measure for interpersonal well-being is an instrument for examining social relationships, which is close to our construct, but perhaps not as close as the notion of intimacy. We will strive to address this possibility in future studies.

Conclusion

In summary, the current study provides strong empirical support for seven factors of well-being: Overall Well-Being, plus the six factors (Interpersonal, Community, Occupational, Physical, Psychological, and Economic) represented in the I COPPE Scale. The importance of the I COPPE factors is grounded in previous research on well-being, with each factor correlating significantly with its comparison measure as well as with overall well-being. The ability of this scale to assess the said domains in a single, easy-to-administer instrument is a potential contribution to the growing body of literature on well-being. If overall well-being, as well as its facets, can be measured with a single, well-integrated, multidimensional measure, then this holds promise for both researchers and practitioners who wish to study and enhance well-being.

We feel our study is especially relevant to community psychologists who advocate multidimensional views of well-being (Nelson & Prilleltensky, 2010; Prilleltensky & Prilleltensky, 2006). Community interventions are often multifaceted, targeting psychological, interpersonal, community, and physical well-being at the same time, to name only a few. Our tool offers an integrative and economical approach to measure these diverse dimensions.

In addition to community interventions, our measure is potentially useful in clinical, psychoeducational, and organizational interventions. Clinicians, facilitators, and human resource professionals can use the I COPPE tool to assess well-being and plan interventions according to the unique profile of individuals, groups, or communities. Obtaining a unique profile of clients can guide mental health professionals in their therapeutic work. In group settings, the I COPPE can serve as a tool for reflection and a stimulus for dialogue.

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APPENDIX A

I COPPE Scale

Instructions for administration of the scale: Our computerized version did not include any special instructions for the respondents, as it was self-evident what to do via computer. If you wish to

administer the I COPPE Scale in paper and pencil format, we recommend you add the following instructions for users: “Read each question and circle the appropriate number on the vertical scale.”

Administration & Scoring: Each item corresponds to one of seven areas of a respondent’s life. These seven areas are: Overall Life plus the I COPPE domains (Interpersonal, Community, Occupational, Physical, Psychological, and Economic). Each item corresponds to one of these seven areas and is numbered 1–7. Each item measures one of three potential time states; past, present or future. Letter sets corresponding to present, past, or future are labelled as “pr”, “pa”, or “fu”, respectively. The table below lists the items of the I COPPE Scale.

21 time-based items corresponding to the overall life area and I COPPE domain

<i>Item label</i>	<i>Domain</i>
1pr., 1pa., 1fu.	Overall Life
2pr., 2pa., 2fu.	Interpersonal
3pr., 3pa., 3fu.	Community
4pr., 4pa., 4fu.	Occupational
5pr., 5pa., 5fu.	Physical
6pr., 6pa., 6fu.	Psychological
7pr., 7pa., 7fu.	Economic

Respondents answer each item by marking the corresponding number on the vertical scale. Each step on an item’s vertical scale is numbered 0–10. The score for each item is the value of the number marked by the respondent. Higher scores indicate greater well-being. One total score is calculated for each of the seven domains by calculating the average of the three time measures. This will yield seven total I COPPE scores.

1pr. On the vertical scale, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **the best possible life for you**, on which number do you stand **now**?

- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 0

1pa. On the vertical scale, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **the best possible life for you**, on which number did you stand **a year ago**?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

1fu. On the vertical scale, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **the best possible life for you**, on which number do you think you will stand **a year from now**?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

2pr. This set of questions pertains to relationships. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **relationships with important people in your life**, on which number do you stand **now**?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

2pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **relationships with important people in your life**, on which number on which number did you stand **a year ago**?

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

2fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **relationships with important people in your life**, on which number do you think you will stand **a year from now**?

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

3pr. This set of questions pertains to your community. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **the community where you live**, on which number do you stand **now**?

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

3pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **the community where you live**, on which number did you stand **a year ago**?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

3fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to the community where you live, on which number do you think you will stand a year from now?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

4pr. This set of questions pertains to your main occupation. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number do you stand now?

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

4pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number did you stand a year ago?

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

4fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your main occupation (employed, self-employed, volunteer, stay at home)**, on which number do you think you will stand **a year from now?**

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

5pr. This set of questions pertains to your physical health and wellness. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your physical health and wellness**, on which number do you stand **now?**

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

5pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your physical health and wellness**, on which number did you stand **a year ago?**

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

5fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your physical health and wellness**, on which number do you think you will stand **a year from now?**

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

6pr. This set of questions pertains to your emotional and psychological well-being. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your emotional and psychological well-being**, on which number do you stand **now?**

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

6pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your emotional and psychological well-being**, on which number did you stand **a year ago?**

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

6fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your emotional and psychological well-being**, on which number did you think you will stand **a year from now?**

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

7pr. This set of questions pertains to your economic situation. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your economic situation**, on which number do you stand **now?**

- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

7pa. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your economic situation**, on which number did you stand **a year ago?**

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

7fu. The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to **your economic situation**, on which number do you think you will stand **a year from now?**

-
- 10
 - 9
 - 8
 - 7
 - 6
 - 5
 - 4
 - 3
 - 2
 - 1
 - 0
-

APPENDIX B

I COPPE Scale: Operational Definitions, Item Stems, and 21 Scale Items

All questions start with following stem: *The top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to*

Overall Well-Being (OV_WB): positive state of affairs, as perceived by individual respondents.

When it comes to the best possible life for you, on which number

OV_WB.PR: do you stand now?

OV_WB.PA: did you stand a year ago?

OV_WB.FU: do you think you will stand a year from now?

Interpersonal Well-Being (IN_WB): satisfaction with the quality of relationships with important people such as family, friends, and colleagues.

When it comes to relationships with important people in your life, on which number

IN_WB.PR: do you stand now?

IN_WB.PA: did you stand a year ago?

IN_WB.FU: do you think you will stand a year from now?

Community Well-Being (CO_WB): satisfaction with one's community.

When it comes to the community where you live, on which number

CO_WB.PR: do you stand now?

CO_WB.PA: did you stand a year ago?

CO_WB.FU: do you think you will stand a year from now?

Occupational Well-Being (OC_WB): satisfaction with one's job, vocation, or avocation.

When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number

OC_WB_PR: do you stand now?

OC_WB_PA: did you stand a year ago?

OC_WB_FU: do you think you will stand a year from now?

Physical Well-Being (PH_WB): state of satisfaction with one's overall health and wellness.

When it comes to your physical health, on which number

PH_WB_PR: do you stand now?

PH_WB_PA: did you stand a year ago?

PH_WB_FU: do you think you will stand a year from now?

Psychological Well-Being (PS_WB): satisfaction with one's emotional life.

When it comes to your emotional and psychological well-being, on which number

PS_WB_PR: do you stand now?

PS_WB_PA: did you stand a year ago?

PS_WB_FU: do you think you will stand a year from now?

Economic Well-Being (EC_WB): satisfaction with one's financial situation.

When it comes to your economic situation, on which number

EC_WB_PR: do you stand now?

EC_WB_PA: did you stand a year ago?

EC_WB_FU: do you think you will stand a year from now?

Note. PR = Present; PA = Past; FU = Future.